

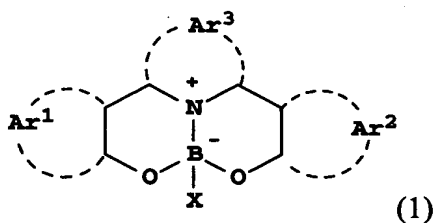
## CLAIMS:

1. An electroluminescent device comprising a cathode, an anode, and therebetween a layer containing a host material and a second material comprising a bis(aryloxy)azine borohalide complex.
- 5           2. The device of claim 1, wherein said layer is a light-emitting layer.
3. The device of claim 2, wherein the light emitting layer emits blue or blue-green light is emitted.
4. The device of claim 1, wherein the borohalide complex is  
10 present in an amount sufficient to improve the stability of the device.
5. The device of claim 2, wherein the light-emitting layer includes a third material which emits light.
6. The device of claim 1 wherein the second material comprises between 0.5 and 20% by weight of the layer.
- 15           7. The device of claim 1 wherein the second material comprises between 0.5 and 8% by weight of the layer.
8. The complex of claim 1, wherein the second material comprises at least six rings.
9. The device of claim 1, wherein the complex comprises a  
20 bis(aryloxy)azine borofluoro complex.

10. The device of claim 1, wherein the complex comprises a pyridine group.

11. The device of claim 1, wherein the complex comprises a pyridine group and a fluoro substituent.

5 12. The device of claim 1, wherein the complex is represented by Formula (1),



wherein:

10 Ar<sup>1</sup> and Ar<sup>2</sup> independently represent the atoms necessary to form an aromatic ring group;

Ar<sup>3</sup> represents the atoms necessary to form a six-membered heteroaromatic ring group, provided that Ar<sup>3</sup> and Ar<sup>1</sup> as well as Ar<sup>3</sup> and Ar<sup>2</sup> may join together to form additional rings; and

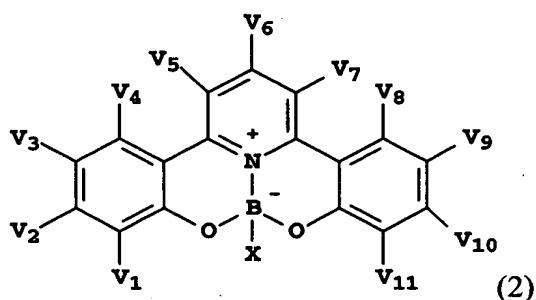
X represents a halide.

15 13. The device of claim 12 wherein X represents fluoro.

14. The device of claim 12, wherein Ar<sup>1</sup> and Ar<sup>2</sup> independently represent the atoms necessary to form six-membered aromatic ring groups.

15. The device of claim 12, wherein Ar<sup>3</sup> represents the atoms necessary to form a pyridine ring group.

20 16. The device of claim 1, wherein the boron complex is represented by Formula (2),



wherein:

each of  $V_1 - V_{11}$  represents hydrogen or an independently selected substituent, provided that substituents may combine to form rings; and

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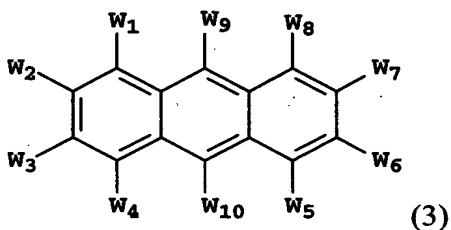
X represents a halide.

17. The device of claim 16 wherein X represents fluoro.

18. The device of claim 16 wherein at least two of  $V_1 - V_{11}$  represent aromatic rings or combine together to form at least two fused aromatic rings.

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19. The device of claim 1 wherein the host material is represented by Formula (3),



wherein:

15 each of  $W_1 - W_{10}$  represent hydrogen or an independently selected substituent, provided that two substituents can combine to form rings.

20. The device of claim 19 wherein  $W^9$  and  $W^{10}$  independently represent naphthyl groups.

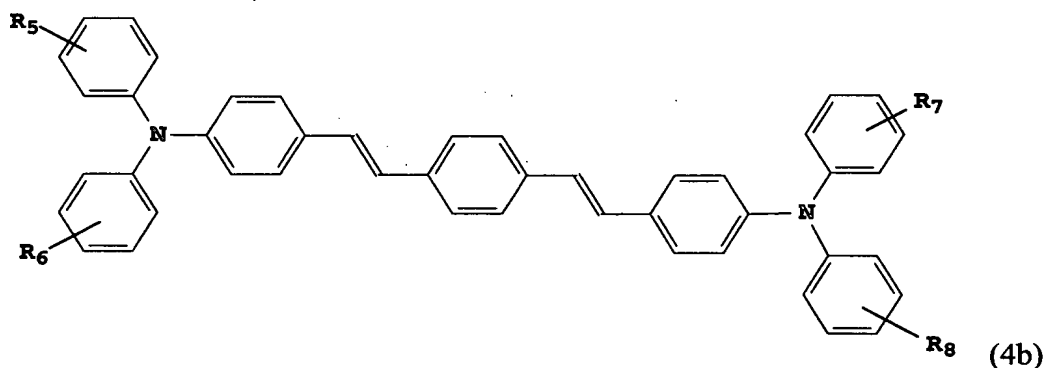
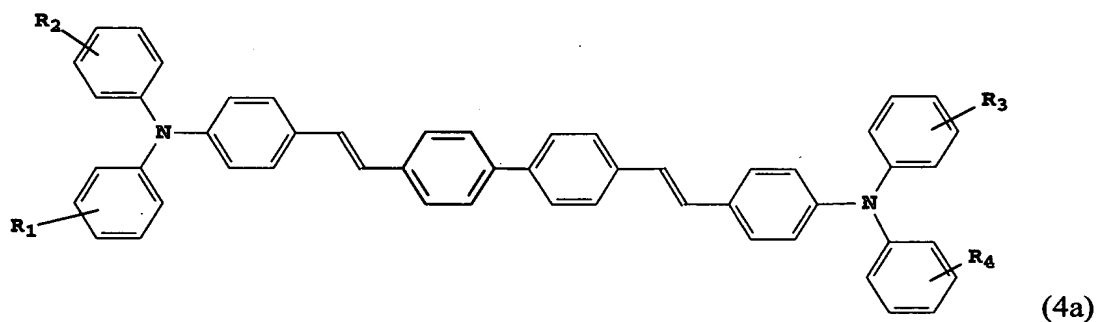
21. The device of claim 19 wherein  $W^9$  represents a biphenyl group.

22. The device of claim 19 wherein  $W^9$  and  $W^{10}$  represent a naphthyl group and a biphenyl group, respectively.

5 23. The device of claim 5 wherein the third material comprises perylene or a derivative of perylene.

24. The device of claim 5 wherein the third material comprises 2,5,8,11-tetra-*t*-butyl perylene.

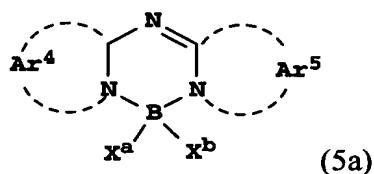
10 25. The device of claim 5 wherein the third material comprises a material of Formula 4a or Formula 4b,



wherein:

each  $R_1 - R_8$  independently represents one or more of hydrogen or an independently selected substituent.

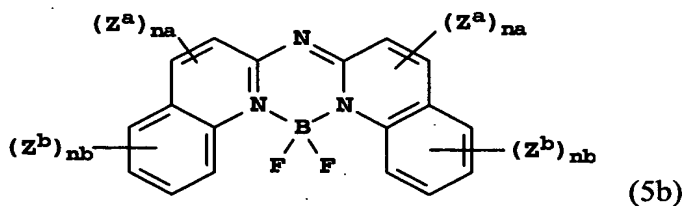
26. The device of claim 5 wherein the third material comprises  
5 a material represented by formula 5a,



wherein:

- $Ar^4$  and  $Ar^5$  independently represent the atoms necessary to form an  
10 aromatic ring group; and  
 $X^a$  and  $X^b$  represent independently selected substituents.

27. The device of claim 5 wherein the third material comprises  
a compound represented by Formula 5b,



wherein:

each  $Z^a$  and  $Z^b$  independently an independently selected  
substituent;

$na$  independently represents 0, 1, or 2;

$nb$  independently represents 0-4.

28. The device of claim 5 wherein the third material is present  
in an amount between 0.5 and 20% by weight of the light-emitting layer.

29. The device of claim 5 wherein the third material is present in an amount between 0.5 and 8% by weight of the light-emitting layer.

30. A display comprising the electroluminescent device of claim 1.

5 31. The device of claim 1 wherein white light is produced either directly or by using filters.

32. An area lighting device comprising the electroluminescent device of claim 1.

10 33. A process for emitting light comprising applying a potential across the device of claim 1.